

ABSTRACT OF THE DISCLOSURE

A pixel defect detecting and correcting apparatus according to the present invention is provided in which the number of correctable defect pixels is not restricted to the capacity of a memory device and defects subsequently generated can be detected and corrected; and includes a color difference and luminance calculating block 1-2 which calculates the absolute values of the color differences of adjacent pixels and a defect judgment target pixel, and color difference and luminance data; a maximum and minimum data values detecting block 1-3 which detects the maximum and minimum values of various kinds of data based on values calculated from the color difference and luminance; a color difference interpolated value calculating block 1-4 and a luminance interpolated value calculating block 1-5 which obtain the color difference interpolated values and luminance interpolated values of the defect judgment target pixel, respectively; and a defect judgment and interpolation processing block (1-6) which, using a plurality of defect detecting methods, concurrently performs defect judgment of the defect judgment target pixel with respect to each of the defect detecting method and executes interpolation processing according to the defect detecting methods in the case of pixel defects; and an interpolated value for use selecting block (1-7) which selects the final output values of pixels judged to be defective.